

# Posttraumatic Stress, Quality of Life, and Psychological Distress in Young Adult Survivors of Childhood Cancer

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**Purpose/Objectives:** To explore the relationship between posttraumatic stress disorder (PTSD) and quality of life (QOL)/psychological outcome in young adult survivors of childhood cancer.

**Design:** Cross-sectional, descriptive study.

**Setting:** A large comprehensive pediatric cancer center on the West Coast.

**Sample:** Fifty-one young adult survivors of childhood cancer, 18–37 years of age, disease free, and off treatment for an average of 11 years (range 2.8–26.7 years).

**Methods:** A structured clinical interview was used to establish a PTSD diagnosis. Self-report instruments were used to assess QOL (RAND SF-36) and psychological distress (Brief Symptom Inventory (BSI)). Survivors with and without PTSD were compared on the BSI and RAND SF-36.

**Main Research Variables:** PTSD status, QOL, and psychological distress.

**Findings:** Eleven subjects (20%) met full criteria for PTSD. Significant group differences were found for 17 of the 18 outcome variables. Survivors with PTSD reported clinically significant levels of psychological distress, whereas symptom levels for those without PTSD fell well within population norms. On all domains, QOL scores were significantly lower for the PTSD group compared to the non-PTSD group.

**Conclusions:** PTSD in survivors of childhood cancer is related to long-term outcome. PTSD is associated with a poorer QOL (physical and mental) and an increase in psychological distress. Data suggest that survivors with PTSD have significant functional limitations and psychological comorbidity.

**Implications for Nursing Practice:** Screening cancer survivors for PTSD will identify high-risk patients who need further evaluation and intervention.

## Key Points . . .

- ▶ A cancer diagnosis is a traumatic event, and some long-term survivors of childhood cancer meet the criteria for posttraumatic stress disorder (PTSD) many years after their treatment has ended.
- ▶ PTSD in adult survivors of childhood cancer is associated with high levels of psychological distress and diminished quality of life.
- ▶ Screening long-term survivors of cancer for PTSD will result in early identification of high-risk patients who require further psychological evaluation and intervention.

opathy, infertility, and growth failure, have been well documented in survivors of childhood cancer (Meister & Meadows, 1993; Schwartz, Hobbie, Constine, & Ruccione, 1994). These medical late effects are the result of toxicities from treatment (radiation, chemotherapy, or surgery) or disease sequelae that emerge months or years after completion of therapy. In a recent study of young adult survivors of childhood cancer ( $n = 96$ , median time since diagnosis = 15.2 years), 69% had at least one medical late effect related to past treatment. About 33% of these late effects were rated as moderate to severe (Oeffinger, Eshelman, Tomlinson, Buchanan, & Foster, 2000). The standard of care for long-term survivors of pediatric cancer includes lifetime surveillance to monitor for late-developing complications of therapy (Neglia & Nesbit, 1993).

Childhood cancer survival rates have increased dramatically over the past 30 years. In 1970, the five-year survival rate was less than 30%, whereas today more than 75% of children who are diagnosed with cancer are expected to survive their disease (Greenlee, Hill-Harmon, Murray, & Thun, 2001). In the United States, an estimated 22,000 young adults between the ages of 20–29 are long-term survivors of childhood cancer (Bleyer, 1990). As this population has grown, the quality of its long-term survival has become increasingly more important.

A significant number of medical late effects, such as cognitive impairment, second malignant neoplasms, cardiomy-

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